

GENERAL NOTES

I. GENERAL

A. CODES AND STANDARDS

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "BUILDING CODE OF THE CITY OF NEW YORK", MOST RECENT EDITION, AND WITH THE REGULATIONS OF ALL GOVERNMENTAL AGENCIES WHICH WOULD HAVE JURISDICTION IF THE PARTY WERE A PRIVATE CORPORATION.
2. WHERE MORE STRINGENT, THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS, LATEST EDITION AND REVISION, SHALL APPLY TO THE WORK ALL AS MODIFIED HEREIN OR BY BUILDING CODE:
 - a. LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC SPECIFICATION).
 - b. CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC CODE) SECTIONS 6, 7, 8 AND 10, ONLY, SHALL APPLY TO THE WORK, EXCEPT AS MODIFIED IN THIS SPECIFICATION, THE REMAINDER BEING SPECIFICALLY EXCLUDED.
 - c. STRUCTURAL WELDING CODE - STEEL, AISC/AWS D1.1 (AAS D1.1).
 - d. STRUCTURAL WELDING CODE - SHEET STEEL, AISC/AWS D1.3 (AAS D1.3).
 - e. SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A133 OR A490 BOLTS, ACCEPTED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS OF THE ENGINEERING FOUNDATION, PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
 - f. SYMBOLS FOR WELDING AND NONDESTRUCTIVE TESTING, AWS A2.4.
 - g. STRUCTURAL WELDING CODE - REINFORCING STEEL, AISC/AWS D1.4 (AAS D1.4).
 - h. SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, BY THE AMERICAN IRON AND STEEL INSTITUTE.
 - i. AISC "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AISC 318.
 - j. AISC "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", AISC 315.
3. REFERENCE IS MADE TO THE EXTENT THAT THE BEST QUALITY OF WORK IS PROVIDED. WORK SHALL CONFORM TO THE EXAMPLES, PROCEDURES AND RECOMMENDATIONS LISTED BELOW, LATEST EDITION AND REVISION, WHEN PROVISIONS OF THE BUILDING CODE, THESE CONTRACT DRAWINGS OR CODES, STANDARDS AND CITED SPECIFICATIONS ARE MORE RESTRICTIVE OR PROVIDE INCREASED QUALITY. THE ENGINEER'S REVIEW OF PROVISIONS, EXAMPLES, PROCEDURES AND RECOMMENDATIONS WHICH PROVIDE BOTH BEST QUALITY AND BUILDING CODE CONFORMANCE SHALL CONTROL THE WORK.
4. MANUAL OF STEEL CONSTRUCTION, LATEST EDITION, BY AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC MANUAL). CONTRACTOR SHALL KEEP AT LEAST ONE FULL COPY IN THE FIELD OFFICE AT ALL TIMES.
5. DETAILING FOR STEEL CONSTRUCTION, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
6. STEEL STRUCTURES PAINTING MANUAL, VOLUME 1, AND VOLUME 2, BY STEEL STRUCTURES PAINTING COUNCIL.

B. SITE CONDITIONS

1. DIMENSIONS AND DETAILS SHOWN IN STRUCTURAL DRAWINGS ARE TAKEN FROM THE ORIGINAL DESIGN DOCUMENTS AND MAY NOT ACCURATELY REPRESENT CURRENT EXISTING CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO EXISTING CONDITIONS BY INSPECTION AND MEASUREMENT AT THE CONSTRUCTION SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. IT IS INTENDED THAT ALL MEMBERS BE PARALLEL AND ERECTED FREE OF SHOP AND FIELD SPICES WHICH ARE NOT SPECIFICALLY SHOWN IN THE CONTRACT DRAWINGS. IF FIELD CONDITIONS REQUIRE FIELD SPACING OF MEMBERS, SUBMIT SITE LOCATIONS FOR ENGINEER'S ACCEPTANCE. WHEN FIELD SPACING IS ACCEPTED, SPICES SHALL BE SHOWN IN THE SHOP DRAWINGS OR IN FIELD WORK DRAWINGS.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CORRECTION OF CONDITIONS OR QUANTITIES AND FOR THE PILING TO OTHER WORK. FOR WORK TO BE CONFIRMED AND CORRELATED AT THE SITE, FOR INFORMATION PERTAINING TO THE FABRICATION PROCEDURE OR TO THE SEAM, METHOD, TECHNIQUE, SEQUENCES AND PROCEDURES OF CONSTRUCTION, AND FOR THE COORDINATION OF THE WORK OF THIS SECTION WITH THE WORK OF ALL OTHER TRADES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PHYSICAL INTERRELATIONSHIPS OF ELEMENTS OF THE WORK FROM PLANS AND SPECIFICATIONS. IN THE FIELD IS THE CONTRACTOR'S SOLE RESPONSIBILITY. THE ENGINEER'S REVIEW OF CONTRACTOR'S SUBMISSIONS DOES NOT RELIEVE CONTRACTOR FROM THESE RESPONSIBILITIES.
4. SPRAYED FIREPROOFING. REMOVE SPRAYED FIREPROOFING AS REQUIRED. UNLESS OTHERWISE SHOWN OR NOTED ON THE CONTRACT DRAWINGS, APPLY SPRAYED FIREPROOFING TO ALL EXISTING STEEL. TO ALL EXISTING STEEL WHERE SPRAYED FIREPROOFING IS DAMAGED OR REMOVED IN THE EXECUTION OF THIS CONTRACT, AND AS DIRECTED BY THE ENGINEER. SPRAYED FIREPROOFING SHALL BE REMOVED BY A FIRE PROOFING COMPANY APPROVED BY THE ENGINEER TO ACHIEVE A MINIMUM 2-HOUR FIRE RATING.
5. HOLES SHALL NOT BE CUT OR DRILLED INTO EXISTING STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE PARTY.

C. SHOP DRAWINGS

1. ONLY SHOP DRAWINGS MARKED "NO EXCEPTIONS TAKEN" OR "MAKE CORRECTIONS NOTED" - RESUBMISSION NOT REQUIRED" MAY BE USED BY THE CONTRACTOR IN THE WORK. SHOP DRAWINGS MARKED "MAKE CORRECTIONS NOTED - RESUBMIT" SHALL BE CORRECTED AND/OR COMPLETED AS REQUIRED AND SHALL BE RESUBMITTED TO THE ENGINEER. THIS PROCESS SHALL BE REPEATED THE NUMBER OF TIMES REQUIRED TO ACHIEVE THE MARK "NO EXCEPTION TAKEN" OR "MAKE CORRECTIONS NOTED - RESUBMISSION NOT REQUIRED".
2. THE CONTRACTOR SHALL NOTE THAT THE ENGINEER'S REVIEW OF SHOP DRAWINGS IS ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND FOR INFORMATION GIVEN IN THE CONTRACT DRAWINGS AND SPECIFICATIONS. INCONFORMITIES AND ERRORS DETECTED DURING THE REVIEW WILL BE NOTED IN THE SHOP DRAWINGS AND RETURNED TO THE CONTRACTOR WITHIN COMPLETION OF THE REVIEW. THE ENGINEER IS NOT RESPONSIBLE FOR THE COMPLETENESS OR ACCURACY OF THE CONTRACTOR'S SHOP DRAWINGS. ACCEPTANCE OF SHOP DRAWINGS, INCLUDING DEVIATIONS NOT DETECTED DURING THE REVIEW, WILL NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO PROVIDE WORK CONFORMING STRICTLY TO THE CONTRACT DOCUMENTS. SHOP DRAWING REVIEW INCLUDES ENGINEERING CALCULATIONS TO THE EXTENT NECESSARY TO ASCERTAIN THAT THE CONTRACTOR'S CALCULATIONS HAVE BEEN COMPETENTLY PREPARED.
3. ENGINEERING CALCULATIONS PERFORMED BY ENGINEER AND PROVIDED TO CONTRACTOR MAY BE REPRESENTATIVE OF MANY SIMILAR CONDITIONS AND SHOULD NOT BE CONSTRUED BY CONTRACTOR AS APPLYING TO ONE DETAIL OR ONE CONDITION ONLY.
4. SHOULD ENGINEER'S MARKS OR CORRECTIONS BE MADE IN ANY SHOP DRAWING THAT WOULD OR COULD RESULT IN INADEQUATE FIT OF ANY PART OR RESULT IN INSUFFICIENT STRENGTH OR STABILITY OF THE WORK, CONTRACTOR SHALL SO NOTIFY IN WRITING SO AS TO EXPEDITE THE REQUIRED CORRECTION OR MODIFICATION. FAILURE BY CONTRACTOR TO PROVIDE PROMPT AND IMMEDIATE NOTIFICATION SHALL RESULT IN RESPONSIBILITY FOR THE INADEQUATE WORK OR CORRECTION RESTING SOLELY WITH CONTRACTOR.

4. RESUBMISSION OF SHOP DRAWINGS: PRIOR TO RESUBMISSION OF SHOP DRAWINGS WITH ADDITIONS, DELETIONS, OR CORRECTIONS, CONTRACTOR SHALL CIRCLE AND IDENTIFY ALL CHANGES FROM THE PRIOR ISSUE. SHOP DRAWINGS SUBMITTED WITHOUT EACH CHANGE BOTH CIRCLED AND CLEARLY IDENTIFIED WILL BE RETURNED FOR RESUBMISSION.

II. REMOVAL

- A. PROVIDE AND PLACE BRACING AND SHORING AS NEEDED. SUPPORT STRUCTURE TO REMAIN AS NECESSARY TO PREVENT DAMAGE OR UNACCEPTABLE DEFLECTION. KEEP ALL BRACING AND SHORING IN PLACE DURING NEW STRUCTURAL STEEL AND CONCRETE CONSTRUCTION AND UNTIL NEW CONCRETE ACHIEVES 80 PERCENT OF DESIGN STRENGTH.
- B. SAWCUT AND REMOVE CONCRETE TO TRUE SMOOTH LINES TO THE EXTENT SHOWN IN THE CONTRACT DRAWINGS AFTER INSTALLATION OF ALL ADDED BEAMS AND REINFORCEMENTS, WITHOUT DAMAGE TO EXISTING REINFORCING STEEL DESIGNATED TO REMAIN. JOINTS BETWEEN EXISTING CONCRETE AND NEW CONCRETE SLAB CONSTRUCTION SHALL BE LEFT CLEAN, ROUGH, AND ESSENTIALLY VERTICAL.
- C. ALL STEEL BEAM CUTS SHALL BE NEAT, SMOOTH, AND TRUE TO LINE. REPAIR EXCESS GAS BURNING SPATTERS AND GOUGES BY NECESSARY WELDING AND GRINDING.

III. STRUCTURAL STEEL

A. GENERAL

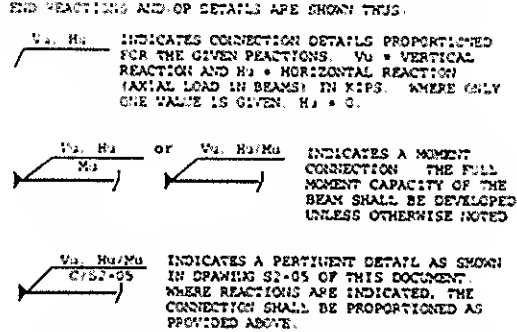
1. UNLESS NOTED OTHERWISE: STRUCTURAL STEEL SHALL BE FY 36. WHERE NOTED OTHERWISE, PROVIDE THE INDICATED YIELD STRESS (I.E., FY 50 IMPLIES A YIELD STRESS OF 50 KSI). THE ASTM GRADE SELECTED FROM STEELS PERMITTED BY THE SPECIFICATIONS.
- ALL CONNECTION PLATES AND ANGLES SHALL BE FY 36 UNLESS NOTED OTHERWISE.
- PIPES SHALL BE FY 36 (ASTM A531).
- TUBES SHALL BE FY 46 (ASTM A501).
- UNLESS SPECIFICALLY NOTED TO THE CONTRARY, ALL BOLTED CONNECTIONS SHALL BE MADE WITH SLIP-CRITICAL, A133 OR A490 BOLTS. THE MINIMUM NUMBER OF BOLTS FOR PLATED CONNECTIONS SHALL BE BASED ON BEAM DEPTH AS TABULATED IN THE TABLE BELOW. WHERE NO REACTION IS PROVIDED IN THE CONTRACT DRAWINGS, OR UNLESS NOTED OTHERWISE, THE CONNECTION SHALL BE PROPORTIONED TO CARRY THE VERTICAL REACTION LISTED IN THE TABLE BELOW.

MINIMUM CONNECTION REQUIREMENTS			
MINIMUM NUMBER OF BOLTS	MINIMUM FACTORED VERTICAL REACTION (KIPS)	CONNECTED TO BEAM OR GIRDER	CONNECTED TO COLUMN
2	14	24	
3	17	24	
4	20	24	
5	26	26	
6	32	26	
7	42	26	
8	42	26	
9	42	26	
10	42	26	
11	42	26	
12	42	26	

BOLTS ARE LIMITED TO THE FOLLOWING DIAMETERS AND GRADES AND WERE SHALL BE REDUCED WHERE THE LOCAL CAPACITY TO SUSTAIN CONNECTION LOADS IS INADEQUATE.

DIAMETER	GRADE	DIAMETER	GRADE
3/4"	A325 SC	1/2"	A325 SC
7/8"	A325 SC	1"	A325 SC
1"	A325 SC	1 1/8"	A325 SC

3. ALL FORCES SHOWN IN STRUCTURAL DRAWINGS AND DETAILS ARE FACTORED FORCES. UNLESS OTHERWISE NOTED.
- END REACTIONS AND/OR DETAILS ARE SHOWN THIS:
 - V_u INDICATES CONNECTION DETAILS PROPORTIONED FOR THE GIVEN REACTIONS. V_u = VERTICAL REACTION AND H_u = HORIZONTAL REACTION (LATERAL LOAD IN KIPS). WHERE ONLY ONE VALUE IS GIVEN, H_u = 0.
 - M_u INDICATES A MOMENT CONNECTION. THE FULL MOMENT CAPACITY OF THE BEAM SHALL BE DEVELOPED UNLESS OTHERWISE NOTED.
 - P_u INDICATES A PERPENDICULAR DETAIL AS SHOWN IN CHAPTER 8.1.5 OF THIS DOCUMENT. WHERE REACTIONS ARE INDICATED, THE CONNECTION SHALL BE PROPORTIONED AS PROVIDED ABOVE.



4. AT CONTRACTOR'S OPTION, CONNECTIONS MAY BE PROPORTIONED BASED ON THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN. END REACTIONS FOR ASD DESIGN SHALL BE 0.75 TIMES THE FACTORED REACTIONS GIVEN IN THE DRAWINGS. DUE TO VARIATIONS IN LOAD FACTORS, THIS 0.75 FACTOR IS CONSERVATIVE IN SOME CASES. THEREFORE, SOME CONNECTIONS PROPORTIONED PER ASD MAY BE MORE CONSERVATIVE THAN IF PROPORTIONED PER LRFD.
5. REINFORCING SHALL BE PROVIDED TO BEAMS AT CONNECTIONS WHERE CUTS HAVE REDUCED THE SHEAR OR MOMENT CAPACITY AND WERE SHALL BE REDUCED WHERE THE LOCAL CAPACITY TO SUSTAIN CONNECTION LOADS IS INADEQUATE.
6. ELECTRODES, PLUM AND SHIELDING GAS SHALL PROVIDE PHYSICAL PROPERTIES AFTER WELDING EQUIVALENT TO OR BETTER THAN E7018 LOW HYDROGEN ELECTRODES.
7. CAMBER WHERE REQUIRED IS INDICATED BY 'C' IN PLANS, FOLLOWED BY THE ORIGINATE. IN MEMBERS, WHEN NO CAMBER IS INDICATED, MEMBERS SHALL BE FABRICATED AND PLACED WITH NATURAL CAMBER UP.
8. PROVIDE 5/16 INCH THICK OR THICKER SHELF ANGLES AT COLUMNS, WALLS AND BEAMS AS REQUIRED TO PROVIDE END AND SIDE DECK SUPPORTS.
9. DOUBLE ANGLE MEMBERS SHALL BE CONNECTED IN ACCORDANCE WITH THE PROVISIONS OF AISC SECTION E4.

11. FILLET WELDS ON GUSSET PLATES, STATED CONNECTIONS AND OTHER PLATE EXTENSIONS SHALL BE RETURNED AROUND THE ENDS OF THE PLATE FOR PLATES EXPOSED TO WEATHER.

12. ERECTION AIDS AND DEVICES ARE NOT SHOWN HEREIN. THE DETAILING OF THESE DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR.

D. SHOP DRAWINGS

1. GENERAL: SHOP DRAWINGS ARE NOT CONTRACT DOCUMENTS, BUT ARE INTENDED TO DEMONSTRATE THE WAY THAT CONTRACTOR INTENDS TO CONFORM TO THE REQUIREMENTS PROVIDED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS. CONTRACTOR MAY WISH TO USE THESE SAME DRAWINGS AS A PART OF THE INSTRUCTIONS GIVEN TO CRAFTSMEN FOR THE ACCOMPLISHMENT OF THE WORK.
2. ERECTION DRAWINGS SHALL SHOW CLEARLY THE SIZE, GRADE AND LOCATION, BOTH IN PLAN AND IN ELEVATION, OF EACH MEMBER TO THE EXTENT DESIRED BY CONTRACTOR. THE STRUCTURAL DRAWINGS MAY BE USED FOR THIS PURPOSE. IN ADDITION TO BASIC INFORMATION GIVEN IN THE STRUCTURAL DRAWINGS, ERECTION DRAWINGS SHALL CONTAIN (FOR EACH PIECE) THE SECTION MARK, THE LOCATION, SIZE AND REINFORCING OF BEAM PENETRATIONS, THE ELEVATION OF TOP OF BEAM, (WHERE SLOPED) THE ELEVATION OF THE WORK POINT OF BOTH ENDS, AND CAMBER.

ADDITIONALLY:

- a. SHOW EACH FIELD CONNECTION COMPLETE WITH DATA AND DETAILS NECESSARY FOR ASSEMBLING THE STRUCTURE. DIRECT SPECIAL ATTENTION TO THE POSSIBLE NEED FOR SPECIAL CUTTING, BRACING OR SHORING TO PREVENT DEFORMATION OF EXISTING OR NEW STRUCTURE DUE TO STRESSES CAUSED BY ERECTION PROCEDURES AND EQUIPMENT, BY CONSTRUCTION LOADINGS AND BY FORCES IMPOSED BY NATURAL PHENOMENA.
3. SHOP DRAWINGS SHALL INCLUDE PLANS, ELEVATIONS, SECTIONS AND COMPLETE DETAILS TO DESCRIBE CLEARLY, AT AN APPROPRIATE SCALE, ALL WORK TO BE PROVIDED. SHOP DRAWINGS SHALL BE ACCURATELY DIMENSIONED AND SHALL BE DATED CLEARLY.
4. SIZE AND GRADE OF STEEL FOR EACH COMPONENT PART OF THE STRUCTURE SHALL BE INDICATED CLEARLY IN SHOP DRAWINGS. ROLLED SHAPES, TUBES, PLATES AND OTHER COMPONENTS SHALL BE IDENTIFIED BY USING THE STANDARD DESIGNATIONS USED IN AISC'S DETAILING FOR STEEL CONSTRUCTION.
5. SYMBOLS, WELDS AND NONDESTRUCTIVE TESTS SHALL BE INDICATED BY USING THE SYMBOLS CONFORMING TO AWS A2.4. SYMBOLS FOR WELDING AND NONDESTRUCTIVE TESTING, WHERE NECESSARY FOR CLARITY, INDICATE WELDING PROCEDURE DESIGNATION OR OTHER DATA IN THE TAIL OF THE WELDING SYMBOL.
6. DETAIL IN ACCORD WITH AND TO ACCOMMODATE CONTRACTOR'S FIELD MEASUREMENTS OF SUPPORTING AND ADJOINING CONSTRUCTION. DO NOT FABRICATE BEFORE ACCEPTED SHOP DRAWINGS HAVE BEEN RETURNED TO CONTRACTOR.
7. INDICATE CLEARLY THE GRADE, SIZE AND NUMBER OF BOLTS, THE TYPE, NUMBER, POSITION, ORIENTATION AND ORIENTATION OF EACH WASHER, THE BOLT TENSION INDICATING SYSTEM AND THE SIZE OF EACH HOLE, WHETHER SLOTTED OR ROUND. PROPORTION CONNECTION DETAILS TO ENSURE ADEQUATE CLEARANCE FOR CORRECT BOLT TENSIONING SEQUENCES.
8. ASTM A490 BOLTS MAY BE USED IN SLIP CRITICAL CONNECTIONS ONLY, NOT RELYING ON THE BEARING CAPACITY OF THE CONNECTION AND NOT TO CARRY DIRECT TENSILE LOADS.
9. REVIEW OF SHOP DRAWINGS WILL INCLUDE THE FOLLOWING:
 - a. MEMBER SIZE, GRADE, SPACING AND ELEVATION.
 - b. STRUCTURAL INTEGRITY OF CONNECTIONS.
 - c. PENETRATIONS, INCLUDING SIZE, AND LOCATION.
10. TEMPORARY, SHIPPING, HANDLING OF ERECTION LOADINGS WILL NOT BE CONSIDERED IN THIS REVIEW.
11. TEMPORARY WORK: REPORT AND IDENTIFY TEMPORARY MEMBERS AND CONNECTIONS WHICH MAY BE REQUIRED FOR TEMPORARY CONSTRUCTION, ERECTION AND THE LIKE.

E. MILL TEST REPORTS

1. SUBMIT CERTIFIED COPIES OF MILL TEST REPORTS FOR ALL STEEL FURNISHED. COMPLY WITH ALL APPLICABLE PARTS OF AISC SPECIFICATIONS. BEYOND ORDERING INFORMATION, MATERIALLY PROVIDED BY CONTRACTOR, THE MILL SHALL BE INSTRUCTED TO COLOR CODE IN ACCORDANCE WITH ASTM A9, AND TO MARK WITH HEAT NUMBER, SIZE, AND TYPE AND GRADE OF STEEL.
2. SUBMIT MANUFACTURER'S CERTIFICATION OF BOLTS, NUTS, WASHERS, DET'S AND THE LIKE FOR EACH PRODUCTION OF EACH GRADE OF EACH TYPE AND EACH SIZE OF FASTENERS CORROSION AND FILLER MATERIAL FOR WELDING.
3. MILL TEST REPORTS SHALL STATE CLEARLY THE FOLLOWING: ASTM SPECIFICATION AND SHALL BE CERTIFIED AND ENDORSED BY CONTRACTOR AS CONFORMING IN ALL RESPECTS TO THAT SPECIFICATION.
4. MATERIAL PROVIDED IN ACCORD WITH THE ABOVE REQUIREMENTS MAY BE USED IN THE WORK WITHOUT FURTHER LOCAL TESTS. IN CASE OF CONTROVERSY, CONTRACTOR SHALL PERFORM TENSION, BEND AND DART OTHER TESTS AS ARE REQUIRED TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND SPECIFICATIONS.
5. TESTS FOR UNIDENTIFIED STEELS. IN THE EVENT, THAT STEEL CANNOT BE IDENTIFIED BY HEAT OR MILL NUMBER BUT IS ACCOMPANIED BY MILL ANALYSIS AND TEST REPORTS, SUCH STOCK MAY BE USED PROVIDED THAT ONE TENSILE AND ONE BEND TEST IS MADE FOR EACH THIRTY TONS (33 TONNES) OR FRACTION THEREOF. COMPLETE, SIX-SIDED SURFACE INSPECTION SHALL BE PERFORMED FOR SUCH MATERIALS. EACH PIECE OF STEEL NOT OF GRADE FY 36 SHALL BE TESTED AND STAMPED.
6. ALL STEEL THAT IS NOT PROPERLY IDENTIFIED OR WHOSE SOURCE IS SUBJECT TO QUESTION SHALL BE REJECTED.
7. STEEL PIPE AND TUBING SHALL HAVE NOT LESS THAN ONE TENSILE, ONE BEND AND ONE FLATTENING TEST FOR EACH ONE INCHES LENGTH OR FRACTION THEREOF. FOR EACH SIZE, FOR EACH WALL THICKNESS AND FOR EACH GRADE. BOTH TENSILE AND BEND TESTS SHALL BE MADE FROM COUPONS TAKEN LONGITUDINALLY.

F. NAMES OF MANUFACTURERS/SUPPLIERS

1. PLATES AND SHAPES
2. BOLTS, NUTS AND WASHERS
3. SHOP AND FIELD PAINT
4. COATING OF WELDED SURFACES
5. WELDING MATERIALS
6. STUD SHEAR CONNECTORS
7. DEFORMED ANCHOR BARS
8. SHIELDING GAS

G. CERTIFICATION OF SHIELDING GAS

1. CERTIFICATION OF SHIELDING GAS: SUBMIT CERTIFICATION THAT SHIELDING GAS IS A WELDABLE GRADE HAVING A DEW POINT OF -40°F (-40°C) OR LOWER.